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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,797	04/15/2004	Masayuki Satake	UNIU79.023AUS	6655

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KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

HON, SOW FUN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,797

Applicant(s)

SATAKE ET AL.

Examiner

Sow-Fun Hon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-17 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Rejections Withdrawn

1. The 35 U.S.C. 103(a) rejections have been withdrawn due to Applicant's amendment dated 10/31/05. The antistatic film of Anderson cannot be used to improve the display quality of a display screen. See Applicant's arguments in the remarks section dated 10/31/05.

New Rejections

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 6-7 of U.S. Patent No. 6,965,418.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the examined claims fully encompass the conflicting claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6-7, 10, 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Hara (US 6,965,418).

The applied reference has a common assignee, Nitto Denko Corporation, with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claims 1-2,12, Hara teaches an antistatic optical film comprising an optical film for improving display-quality of a display screen (light-transmitting high molecular substrate, column 3, lines 10-15, mounting on a liquid crystal display, column 8, lines 35-38); and an antistatic layer laminated on and in contact with at least one side

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of the optical film (formed on the back surface of the light-transmitting high-molecular substrate, column 3, lines 10-15), wherein the antistatic layer comprises a conductive polymer such as polyaniline (column 3, lines 45-57) which is water soluble or water dispersible as defined by Applicant's specification (original claim 2).

Regarding claim 3, Hara teaches that the surface resistance value of the antistatic layer is $1 \times 10^{11} \Omega/\square$ (10×10^{10} ohm or less in surface resistance, column 8, lines 53-55), which is within the claimed range of $1 \times 10^{12} \Omega/\square$ or less.

Regarding claim 4, Hara teaches that a pressure sensitive adhesive layer is laminated on another side of a surface having the optical film of the antistatic layer (the polarizer may be provided with an adhesive layer, wherein the adhesive is a rubber series one, column 5, lines 5-12). Rubber is pressure sensitive.

Regarding claim 6, Hara teaches that the optical film comprises a polarizing plate (polarizer, column 5, line 5).

Regarding claim 7, Hara teaches that the surface material of the optical film on which the antistatic layer is laminated is a polycarbonate (column 3, lines 24-26).

Regarding claim 10, Hara teaches a liquid crystal display, which is an image viewing display, comprising the antistatic film (column 8, lines 35-38).

4. Claims 1-3, 6, 8, 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Mukunoki (US 6,914,139).

Regarding claims 1-2, 12-13, Mukunoki teaches an antistatic optical film (antistatic layer on polarizer, column 12, lines 31-36) comprising: an optical film for improving display quality of a display screen (polarizing plate, column 12, lines 31-35,

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film, column 19, lines 35-40); and an antistatic layer laminated on and in contact with at least one side of the optical film (may be on the surface layer or the inner layer, column 12, lines 39-40), wherein the antistatic layer comprises a water soluble or a water dispersible conductive polymer, such as polyaniline and polythiophene (column 12, lines 46-53) as defined by Applicant's specification (original claim 2).

The recitation "for improving display quality of a display screen" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). See MPEP 2111.02. In the instant case, the polarizing plate of Mukunoki is used in a liquid crystal display (column 19, lines 30-35) for improving the display quality of the display screen.

Regarding claim 3, Mukunoki teaches that the antistatic layer has a surface resistance value of $1 \times 10^{12} \Omega/\square$ or less (column 12, lines 39-42).

Regarding claim 6, Mukunoki teaches that the optical film comprises a polarizing plate (column 12, lines 31-35, film, column 19, lines 35-40).

Regarding claim 8, Mukunoki teaches that an activation treatment is given to the optical film (surface treatment to improve adhesion, column 12, lines 3-10).

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Regarding claims 10-11, Mukunoki teaches a liquid crystal display which comprises a liquid crystal cell of VA mode (column 14, line 1), wherein the antistatic optical film is provided on one side of the liquid crystal cell (film used as the support of the optical compensatory sheet for a liquid crystal, column 13, lines 65-67, display of VA type having a liquid crystal cell of VA mode, column 14, line 1).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 4-5, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukunoki as applied to claims 1-3, 6, 8, 10-13 above, and further in view of Mikura (US 5,880,800).

Regarding claims 4-5, Mukunoki has been discussed above, and teaches an adhesive layer laminated on another side of a surface having the optical film of the antistatic layer (adhesive layer and the film, column 12, line 5). Mukunoki fails to teach that the adhesive layer is pressure sensitive, let alone that it is acrylic.

However, Mikura teaches that it is well known in the prior art to use an acrylic pressure-sensitive adhesive layer on an optical base film to attach to a liquid crystal cell, for the purpose improving the efficiency of the display assembling and preventing the occurrence of dispersion of quality (column 1, lines 14-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used an acrylic pressure-sensitive adhesive layer

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as the adhesive layer laminated on another side of a surface having the optical film of the antistatic layer of Mukunoki, in order to improve the efficiency of the display assembly and to prevent any dispersion in display quality, as taught by Mikura.

Regarding claim 7, Mukunoki fails to that a surface material of the optical film on which the antistatic layer is laminated is a polycarbonate.

However, Mikura teaches that a transparent protective layer excellent in transparency (column 3, lines 65-67), mechanical strength, heat stability and moisture-shielding property is made from polycarbonate (column 4, lines 1-5) for the purpose of providing the desired properties.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a polycarbonate as the surface material of the optical film of Mukunoki, in order to provide the desired mechanical strength, heat stability and moisture-shielding property, as taught by Mikura.

6. Claims 9, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukunoki as applied to claims 1-3, 6, 8, 10-13 above, and further in view of Muys (US 5,391,472).

Mukunoki has been discussed above, and teaches an antistatic layer laminated on and in contact with at least one side of the optical film (may be on the surface layer or the inner layer, column 12, lines 39-40), wherein the antistatic layer comprises a water soluble or a water dispersible conductive polymer, such as polyaniline and polythiophene (column 12, lines 46-53) as defined by Applicant's specification (original claim 2). Mukunoki fails to teach a method of manufacturing the antistatic optical film

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comprising the steps of applying an aqueous solution or an aqueous dispersion comprising the water soluble or water dispersible conductive polymer on the optical film; and drying to form the antistatic layer; let alone that the water dispersible polymer is constituted by micro-particles having a size of 1 μm or less.

However, Muys teaches a method comprising the steps of applying an aqueous dispersion of polythiophene (column 12, lines 34-40) on the optical film (polyethylene terephthalate film support, column 13, lines 1-2); and drying to form the antistatic layer (column 13, line 7); and that the water-dispersible polythiophene is constituted by micro-particles having the size of 1 or less (column 5, lines 29-32), for the purpose of providing the desired coating properties.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have manufactured the optical film of Mukunoki, by a method comprising the steps of applying an aqueous solution or an aqueous dispersion comprising the water soluble or water dispersible conductive polymer on the optical film; and drying to form the antistatic layer; and to have provided the water dispersible polymer in the form of micro-particles having a size of 1 μm or less, in order to provide the desired coating properties, as taught by Muys.

7. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukunoki as applied to claims 1-3, 6, 8, 10-13 above, and further in view of Katashima (US 6,310,133).

Mukunoki has been discussed above, and teaches an antistatic layer laminated on and in contact with at least one side of the optical film (may be on the surface layer

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or the inner layer, column 12, lines 39-40), wherein the antistatic layer comprises a water soluble or a water dispersible conductive polymer, such as polyaniline and polythiophene (column 12, lines 46-53) as defined by Applicant's specification (original claim 2). Mukunoki fails to teach that the polyaniline or polythiophene contains a hydrophilic functional group in a molecule, or that the solubility of the water-soluble conductive polymer is 20-30 g per 100 g water.

However, Katashima teaches an antistatic layer (column 5, lines 54-56) formed from sulfonated polyaniline, which is soluble in water (column 6, lines 36-42). The sulfonate group is a hydrophilic functional group, for the purpose of providing the polyaniline with solubility in water. Katashima teaches that the solution is almost transparent when the concentration is low (column 6, lines 45-46). Thus, the solubility of 20-30 g per 100 g water is dependent on the number of hydrophilic sulfonate groups, which is the result of routine experimentation for one of ordinary skill in the art, for the purpose of providing the desired aqueous coating properties.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used polyaniline or polythiophene which contains a hydrophilic functional group in a molecule, in the amount that the polyaniline or polythiophene has a solubility of 20-30 g per 100 g of water, as the polyaniline or polythiophene of Mukunoki, in order to obtain the desired coating properties, as taught by Katashima.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Hon

Sow-Fun Hon

01/20/06

Harold Pyon
HAROLD PYON
SUPERVISORY PATENT EXAMINER
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